

### **REMARKS**

This amendment is responsive to the Office Action of June 14, 2007. Reconsideration and allowance of claims 2-20 are requested.

#### **The Office Action**

Claims 1-13 stand rejected under 35 U.S.C. § 102 as being anticipated by Sellers (US 6,075,363).

#### **Substitute Drawings**

As required by the Examiner, the applicant is enclosing four sheets of substitute drawings, in which the boxes have been labeled. An early indication of the acceptability of these replacement Formal Drawings is requested.

#### **The Claims Distinguish Patentably Over the References of Record**

**Sellers** (US 6,075,363) shows a cooling system **34** which includes a single set of cooling lines connected to an external cooling unit **37** and extending through the gradient coil. The Sellers system evidences no capacity to cool different parts of the gradient coil system differently and provides no disclosure that the cooling system **34** or the controller **30** are configured to cool or heat different parts of the gradient coil system differently.

**Claim 4**, which calls for influencing the temperature of different parts of the gradient coil system to a different degree, has been placed in independent form.

Accordingly, it is submitted that **claim 4 and claims 5, 6, 8-10, 12, and 20 dependent therefrom** distinguish patentably over the references of record.

Moreover, **dependent claim 6** calls for the fluid circuit to have two separate circuit parts. Sellers fails to disclose two circuit parts.

**Dependent claim 9** further adds that the separate parts extend through different parts of the coil. Again, Sellers fails to disclose different fluid circuit parts extending through different parts of the gradient coil system. Claim 9 further adds the requirement that at least one of the separate circuit parts primarily influences the temperature of one or a number of subgradient coils and another of the separate circuit

parts primarily influences the temperature of the binding agent. Sellers fails to disclose separate circuit parts for cooling subgradient coils and the binding agent.

**Dependent claim 10** further requires that the separate parts of the fluid circuit are controlled independently of one another. Again, Sellers fails to disclose separate cooling circuit parts, much less independent control.

**Dependent claim 12** requires that the temperature-influencing means include electrical resistance wires in the binder material. Sellers does not disclose resistance heating wires in the binder material.

**Dependent claim 20** further calls for a fluid cooling circuit in addition to the electrical resistance wires. Sellers does not disclose separate heating and cooling units.

For the reasons set forth above, it is submitted that dependent **claims 6, 8-10, 12, and 20** are not anticipated by and distinguish over Sellers.

**Claim 7**, which calls for a mixing valve, has been placed in independent form. Because Sellers does not disclose a mixing valve, it is submitted that **claim 7 and claims 2-3 dependent therefrom** are not anticipated by Sellers.

**Claim 11** has been amended to call for the control unit to control the operation of the temperature-influencing unit on the basis of data regarding the projected energy consumption by the gradient coil system for an image to be made by the MRI apparatus. Sellers makes no suggestion that the controller **40** should control the cooling system in accordance with anticipated energy of an upcoming MRI sequence.

Accordingly, it is submitted that **claim 11 and claims 17-19 dependent therefrom** are not anticipated by Sellers.

**Claim 13** has been amended to call for the temperature of the binder material of different parts of the coil control system to be controlled to a different degree. Sellers makes no suggestion of controlling the temperature of different parts of the gradient coil system to a different degree.

Accordingly, it is submitted that **claim 13 and claims 14-16 dependent therefrom** are not anticipated by and distinguish patentably and unobviously over the references of record.

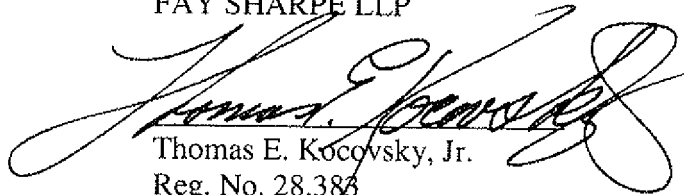
**CONCLUSION**

For the reasons set forth above, it is submitted that claims 2-20 are not anticipated by and distinguish patentably over the references of record. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he is requested to telephone Thomas Kocovsky at (216) 861-5582.

Respectfully submitted,

FAY SHARPE LLP

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and address.

Thomas E. Kocovsky, Jr.

Reg. No. 28,383

1100 Superior Avenue, 7th Floor

Cleveland, OH 44114-2579

(216) 861-5582